

(56)

References Cited**OTHER PUBLICATIONS**

- Dien B.S. et al., (2000), "Development of New Ethanologenic *Escherichia coli* Strains for Fermentation of Lignocellulosic Biomass." *Appl. Biochem. and Biotech.* 84-86:181-96.
- Distel, D.L. et al., (2002), "Teredinibacter turnerae gen. nov., sp. nov., a Dinitrogen-Fixing, Cellulolytic, Endo Symbiotic Gamma-Proteobacterium Isolated from the Gills of Wood-Boring Molluscs (Bivalvia:Teredinidae)." *Int. J. Syst. Evol. Micorbiol.* 52(6):2261-2269.
- Doi, R. H., et al. (2004) "Cellulosomes: Plant-cell-wall-degrading enzyme complexes." *Nat. Rev. Microbiol.* 2:541-551.
- Doner, L. W., et al. (1992) "Assay of reducing end-groups in oligosaccharide homologs with 2,2'-bicinchoninate." *Anal. Biochem.* 202:50-53.
- Ducros, V., et al (1995) "Crystal-structure of the catalytic domain of a bacterial cellulase belonging to family-5." *Structure* 3:939-949.
- Ekborg, et al (2006) "Genomic and Proteomic Analyses of the Agarolytic System Expressed by *Saccharophagus degradans* 2-40." *App. Enviro. Micro.* 72(5):3396-3405.
- Ekborg, N.A. et al., (2005), "*Saccharophagus degradans* gen. nov., sp. Nov., a Versatile Marine Degrader of Complex Polysaccharide." *Int. J. Of Systemic and Evolutionary Microbiology*, 55:1545-1549.
- Emami, K. et al., (2002), "Evidence for Temporal Regulation of the Two Pseudomonas cellulose Xylanases Belonging to Glycoside Hydrolase Family 11." *J. Bact.* 184(15):4124-4133.
- Ensor L.A. et al., (1999), "Expression of Multiple Complex Polysaccharide-Degrading Enzyme Systems by Marine Bacterium Strain 2-40." *J. Indust. Microbiol. & Biotech.* 23:123-26.
- Evans, F.F., et al. (2008) "Ecology of type II secretion in marine gammaproteobacteria." *Environmental Microbiology*, 10(5):1101-1107.
- Everett et al. Pendred syndrome is caused by mutations on a putative sulphate transporter gene (PDS). *Nature Genetics* 17: 411-422. 1997. Extended European Search Report from EP 11179105.9, dated Oct. 12, 2011.
- Ghose, T. K. (1987) "Measurement of cellulase activities." *Pure Appl. Chem.* 59:257-268.
- Gilad, R., et al (2003) "Cell, a noncellulosomal family 9 enzyme from *Clostridium thermocellum*, is a processive endoglucanase that degrades crystalline cellulose." *J. Bacteriol.* 185:391-398.
- Gonzalez J.M. et al., "Phylogenetic Characterization of Marine Bacterium Strain 2-40, a Degrader of Complex Polysaccharides." *Int. J. Of Systematic and Evolutionary Microbiology*, (2000), 8:831-34.
- Grethelein, H. (1978) "Chemical Breakdown of Cellulosic Materials." *J. Appl. Chem. Biotechnol.* 28:296-308.
- Henrissat B. et al., (1993), "New Families in the Classification of Glycosyl Hydrolases Based on Amino Acid Sequence Similarities." *Biochem. J.* 293:781-788.
- Henrissat B. et al., (1998), "A Scheme for Designating Enzymes that Hydrolyse the Polysaccharides in the Cell Walls of Plants." *FEBS Lett.*, 425:352-54.
- Henrissat, B., et al. "(1993) New families in the classification of glycosyl hydrolases based on amino acid sequence similarities." *Biochem. J.* 293(Pt. 3):781-788.
- Himmel, M. E. (2007) "Biomass recalcitrance: engineering plants and enzymes for biofuels production." *Science* 316:982-982.
- Horn, S. J., et al (2006) "Costs and benefits of processivity in enzymatic degradation of recalcitrant polysaccharides." *Proc. Natl. Acad. Sci. USA* 103:18089-18094.
- Howard, M. B., et al (2004) "Identification and analysis of polyserine linker domains in prokaryotic proteins with emphasis on the marine bacterium *Microbulbifer degradans*." *Protein Sci.* 13:1422-1425.
- Howard, M.B. et al (2003) "Genomic Analysis and Initial Characterization of the Chitinolytic System of *Microbulbifer degradans* Strain 2-40." *J. Bact.* 185(11):3352-3360.
- <http://www.ncbi.nlm.nih.gov/protein/23027746>. NCBI Reference Sequence: ZP_00066178.1. 2010.
- International Search Report, International Application No. PCT/US2010/1030075. Korean Intellectual Property Office, Jan. 20, 2011.
- Irwin, D. C., et al. (1993) "Activity studies of 8 purified cellulases—specificity, synergism, and binding domain effects." *Biotechnol. and Bioeng.* 42:1002-1013.
- Jeoh, T., et al. (2006) "Effect of cellulase mole fraction and cellulose recalcitrance on synergism in cellulose hydrolysis and binding." *Biotechnol. Progr.* 22:270-277.
- Jonsson, A.P. et al., (2001), "Recovery of Gel-Separated Proteins for In-Solution Digestion and Mass Spectrometry." *Anal. Chem.* 73(22):5370-77.
- Kang, M. S, et al (2007) "Effect of *Leuconostoc* spp. on the formation of *Streptococcus mutans* biofilm." *J. Microbiol.* 145:291-296.
- Kelley, S.K. et al., (1990), "Identification of a Tyrosinase from a Periphytic Marine Bacterium." *FEMS Microbiol. Lett.* 67:275-80.
- Ken-Ichi Akagi et al. Identification of the Substrate Interaction Region of the Chitin-Binding Domain of *Streptomyces griseus* Chitinase C. *J. Biochem.* 2006, vol. 139, No. 3, pp. 483-193.
- Klinke, H.B. et al., (2004), "Inhibition of Ethanol-Producing Yeast and Bacteria by Degradation Products Produced During Pre-treatment of Biomass." *Appl. Microbiol. Biotechnol.* 66:10-26.
- Ko et al. Optimal production of a novel endo-acting beta-1,4-xylanase cloned from *Saccharophagus degradans* 2-40 into *Escherichia coli* BL21(DE3). *N Biotechnol.* Oct. 31, 2009;26(3-4):157-64.
- Kosugi, A. et al., (2002), "Characterization of Two Noncellulosomal Subunits, ArfA and BgaA, from *Clostridium Cellulovorans* that Cooperate with the Cellulosome in Plant Cell Wall Degradation" *J. Bacteriol.* 184(24):6859-65.
- Krishna S H et al: "Simultaneous saccharification and fermentation of lignocellulosic wastes to ethanol using a thermotolerant yeast", *Bioresource Technology*, vol. 77, Jan. 1, 2001, pp. 193-196.
- Kumar, R., et al. (2008) "Bioconversion of lignocellulosic biomass: biochemical and molecular perspectives." *J. Ind. Microbiol. Biot.* 35:377-391.
- Laemmli, U. K. (1970). "Cleavage of structural proteins during the assembly of the head of the bacteriophage T4." *Nature* 277:680-685.
- Li, Y. C., et al. (2007) "Processivity, substrate binding, and mechanism of cellulose hydrolysis by *Thermobifida fusca* Cel 9A." *Appl. Environ. Microbiol.* 73:3165-3172.
- Lin, Y. et al., (2006), "Ethanol Fermentation From Biomass Resources: Current State and Prospects." *Appl. Microbiol. Biotechnol.* 69:627-42.
- Ljungdahl, L.G. et al., (1985), "Ecology of Microbial Cellulose Degradation." *Advances in Microbial Ecology*. New York, Plenum Press. 8:237-299.
- Lo Leggio, L., et al. (2002) "The 1.62 angstrom structure of *Thermoascus aurantiacus* endoglucanase: completing the structural picture of subfamilies in glycoside hydrolase family 5." *FEBS Lett.* 523:103-108.
- Lou, J., et al. (1996) "Role of phosphorolytic cleavage in cellobiose and celldextrin metabolism by the ruminal bacterium *Prevotella ruminicola*." *Appl Environ. Microbiol.* 62(5): 1770-1773.
- Lynd, L.R. et al., (2002), "Microbial Cellulose Utilization: Fundamentals and Biotechnology." *Microbiol. Mol. Biol. Rev.* 66(3):506-77.
- Martinez, D., et al (2008) Genome sequencing and analysis of the biomass-degrading fungus *Trichoderma reesei* (syn. *Hypocreah jecorina*). *Nat. Biotechnol.* 26:1193-1193.
- Park, J. K. et al. (2002) "Molecular cloning and characterization of a unique β -glucosidase from *Vibrio cholerae*." *J. Biol. Chem.* 277:29555-29560.
- Qi, M., et al. (2007) "Characterization and synergistic interactions of *Fibrobacter succinogenes* glycoside hydrolases." *Appl. Environ. Microbiol.* 73:6098-6105.
- Qi, M., et al. (2008) "Ce19D, an atypical 1,4-3-D-glucan glucohydrolase from *Fibrobacter succinogenes*: characteristics, catalytic residues, and synergistic interactions with other cellulases" *J. Bacteriol.* 190:1976-1984.
- Rubin, E. M. (2008) "Genomics of cellulosic biofuels." *Nature* 454:841-845.
- Sakon, J., Irwin, et al. (1997) "Structure and mechanism of endo/exocellulase E4 from *Thermomonospora fusca*." *Nat Struct. Biol.* 4:810-818.